

5 I claim:

1. A recloseable bag having front and rear faces, comprising:

a bag, and

a bendable shape-retaining flat T-shaped spine bonded to a face of said bag.

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2. A recloseable bag according to claim 1, wherein said T-shaped spine is bonded to said bag using conventional heat sealing technology or adhesives.

3. A recloseable bag according to claim 2, wherein said bag is for storing food articles.

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4. A recloseable bag according to claim 3, wherein said bag is folded and formed by a form, fill and seal (FFS) machine.

5. A recloseable bag according to claim 4, wherein said bag is folded and formed by said

20 FFS machine with a top seam, a bottom seam and a center rear seam.

5        6. A recloseable bag according to claim 5, wherein said T-shaped spine is positioned with  
the horizontal axis of the T adjacent the top seam and the vertical axis of the T pointing towards  
the bottom seam.

7. A recloseable bag according to claim 6, wherein said seams are heat seams.

10      8. The recloseable bag according to claim 2, wherein said T-shaped spine is formed of a  
bendable shape-retaining plastic polymer material.

9. The recloseable bag according to claim 2, wherein said T-shaped spine is formed of  
15      resilient plastic having a bendable shape-retaining strand embedded centrally therein.

10. The recloseable bag according to claim 6, wherein said bag is further comprised of  
two of said spines bonded to the rear face of said bag, each of said two spines positioned parallel  
said center rear seam.

20      11. A machine for manufacturing a recloseable bag with flat spines; said machine  
comprised of  
at least two feeder spools;

5           a tension roller;

an alignment spool;

a press for bonding said spines to said bag material; and,

servo-driven feed motors;

wherein said servo-driven motors drive said feed spools; and,

10          wherein a first feeder spool feeds bag material, guided by said tension rollers and alignment spool, into said press and a second feeder spool feeds spine material into said press.

12. The machine according to claim 11, further comprising a heated press.

15          13. The machine according to claim 12, wherein said press is mounted to a hydraulic arm for proper stamping force (a hydraulic press).

14. The machine according to claim 13, wherein said press bonds said spines to said bag material using a heat-weld.

20          15. The machine according to claim 13, wherein said press is equipped with an integral glue applicator for adhesive bonding of the spines to the bag material.

5        16. The machine according to claim 12, further comprising a press with an integral cutter; wherein said second feeder spool feeds a first unitary strip of spine material into said press and a first feeder spoil feeds a second unitary strip of spine material into said press perpendicular to said first unitary strip; and wherein said cutter cuts said first and second unitary strips to form said T-shapes.

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17. The machine according to claim 16, further comprising a second feeder spoil integrated into an FFS machine for feeding said bag material with said bonded spines into said FFS machine.

15        18. The machine according to claim 17, wherein said hyrdaulic press is electrically connected to an existing programmable controller of said FFS machine for programmed intermittent operation thereof.

20        19. A method for producing a recloseable bag, comprising the steps of  
feeding bag material into a press;  
feeding bendable shape-retaining flat spine material into said press; and,  
bonding said spines material to said bag material.

5            20. A method for producing a recloseable bag, according to claim 19, wherein the step of  
feeding bendable shape-retaining flat spine material into said press; further comprising feeding  
two unitary strips of said flat spine material into said press, perpendicular to each other, and  
cutting each of said strips to form T-shaped spines.

10          21. A method for producing a recloseable bag according to claim 20, wherein said spine  
material is bonded to said bag material by heat welding or adhesive.